CLAIMS

What is claimed is:

1. A flexible welding implement, comprising:

a torch head operable to couple electricity to a welding electrode disposed therein;

a cooling fluid supply tube operable to convey a cooling fluid to the torch head; and

a first coiled wire spring operable to flexibly couple the cooling fluid supply tube to the torch head.

2. The flexible welding implement as recited in claim 1, comprising:

a cooling fluid return tube operable to convey the cooling fluid from the torch head; and

a second coiled wire spring operable to flexibly couple the cooling fluid return tube to the torch head.

3. The flexible welding implement as recited in claim 2, comprising:

a gas supply tube operable to convey a gas to the torch head; and

a third coiled wire spring operable to flexibly couple the gas supply tube to the torch head.

4. The flexible welding implement as recited in claim 1, comprising a second cooling fluid supply tube secured to the torch head, wherein the cooling fluid supply tube is coupled to the second cooling fluid supply tube by the second coiled wire spring.

5. The flexible welding implement as recited in claim 4, comprising a flexible tube disposed over the first coiled wire spring to define a fluid channel for the cooling liquid to flow from the gas supply tube to the second gas supply tube axially through the center of the first coiled wire spring.

6. The flexible welding implement as recited in claim 1, comprising a second cooling fluid return tube secured to the torch head, wherein the cooling fluid return tube is coupled to the second cooling fluid return tube by the second coiled wire spring.

7. The flexible welding implement as recited in claim 5, comprising a second gas supply tube secured to the torch head, wherein the gas supply tube is coupled to the second gas supply tube by the third coiled wire spring.

8. The flexible welding implement as recited in claim 6, comprising a second flexible tube disposed over the second coiled wire spring and a third flexible tube disposed over the third coiled wire spring.

9. The flexible welding implement as recited in claim 7, comprising a handle disposed over the gas supply tube, the cooling fluid supply tube, and the cooling fluid return tube.

10. A flexible welding implement, comprising:

a torch coupleable to a handle, comprising:

a torch head operable to receive a cooling liquid; and

a spring disposed within the torch to enable the torch head to be displaced relative to the handle, wherein the torch directs the cooling liquid to flow axially through the spring to the torch head.

11. The flexible welding implement as recited in claim 10, comprising a flexible tube disposed over the spring, a portion of the first tube, and a portion of the second tube to define a fluid channel for the cooling liquid to flow axially through the spring.

12. The flexible welding implement as recited in claim 11, wherein the flexible tube comprises heat shrink tubing.

13. The flexible welding implement as recited in claim 10, comprising a second spring disposed within the torch to enable the torch head to be displaced relative to the handle, wherein the torch is adapted to direct the cooling liquid to flow from the torch head axially through the second spring.

14. The flexible welding implement as recited in claim 13, comprising a third spring disposed within the torch to enable the torch head to be displaced relative to the handle, wherein the torch is adapted to direct a gas to flow axially through the third spring to the torch head.

15. The flexible welding implement as recited in claim 14, comprising a second tube coupleable to a cooling liquid return line and a third tube coupleable to a gas supply tube.

16. The flexible welding implement as recited in claim 15, comprising a tube support member, wherein the first tube, the second tube, and the third tube are disposed through the tube support member.

17. The flexible welding implement as recited in claim 10, comprising the handle.

18. A welding implement, comprising:
a torch, comprising:
a torch head;
a tripod support system secured to the torch head to flexibly support the torch head, the tripod comprising:
a first leg comprising a first spring;
a second leg comprising a second spring; and
a third leg comprising a third spring.

19. The welding implement as recited in claim 18, wherein at least one of the legs is adapted to direct a fluid axially through the first spring.

20. The welding implement as recited in claim 19, wherein the first leg is adapted to direct a gas axially through the first spring.

21. The welding implement as recited in claim 20, wherein the second leg is adapted to direct a cooling fluid to the torch head axially through the second spring, and the third leg is adapted to direct the cooling fluid from the torch head axially through the second spring.

22. The welding implement as recited in claim 18, comprising a plurality of tubes and a tube support member, wherein each leg of the tripod support system comprises a tube disposed through the tube support member.

23. The welding implement as recited in claim 22, wherein each of the springs comprises a coiled wire spring secured to an end of one of the plurality of tubes.

24. The welding implement as recited in claim 22, comprising a handle coupleable to the torch, wherein the tripod support system enables the torch head to be flexibly positioned relative to the handle.

25. The welding implement as recited in claim 18, comprising a deformable support member extending through the tripod support system intermediate the first leg, the second leg, and the third leg.

26. The welding implement as recited in claim 25, wherein the deformable support member comprises a plurality of wires braided together.

27. The welding implement as recited in claim 26, wherein the plurality of wires comprises a first coiled portion disposed over the first leg, a second coiled portion disposed over the second leg, and a third coiled portion disposed over the third leg.

28. A method of manufacturing a flexible welding implement, comprising:

securing a coiled wire spring to an end of a first tube;

securing a second tube to a torch head;

securing the coiled wire spring to an end of the second tube; and

disposing a flexible tube over the coiled wire spring to enable a fluid to flow through the first tube, the flexible tube, and the second tube to the torch head.

29. The method as recited in claim 28, wherein securing a coiled wire spring to an end of a first tube comprises brazing the coiled wire spring to the end of the first tube.

30. The method as recited in claim 28, wherein disposing a flexible tube over the coiled wire comprises applying heat to the flexible tube to shrink the flexible tube onto the coiled wire spring.

31. The method as recited in claim 28, molding an insulating material over the flexible tube.

32. The method as recited in claim 28, comprising disposing the first tube through a tube support member operable to support a plurality of tubes.

33. The method as recited in claim 28, molding an insulating material over the flexible tube.

34. The method as recited in claim 28, comprising disposed a coiled end portion of a support member over the first tube and securing an opposite end of the support member to the torch head.